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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,254	06/27/2001	James Gips	BOK-002.01	3288

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FOLEY HOAG, LLP
PATENT GROUP, WORLD TRADE CENTER WEST
155 SEAPORT BLVD
BOSTON, MA 02110

EXAMINER

KE, PENG

ART UNIT PAPER NUMBER

2174

DATE MAILED: 12/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/892,254	GIPS ET AL.	
	Examiner	Art Unit	
	Peng Ke	2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 48-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 48-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is responsive to communications: Amendment, filed on 10/06/05.

Claims 48-57 are pending in this application. Claim 48 is an independent claim. In the Amendment, filed on 10/6/05, claims 1-47 are cancelled, claims 53-57 were added, and claims 48 and 49 amended.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 48, 49, 51, and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnston et al. (US 6,791,531) in view of Maruno et al. (US 6,191,773).

As per claim 48, Johnston et al. teaches a method for emulating a mouse in providing input to a system which uses a visual display for providing user information and an indicator in the visual display for permitting user control, comprising:

- (a) choosing a feature associated with a system user; (col. 5, lines 42-61)
- (b) determining a location of the feature in a video image from a video camera at an initial time; (col. 11, lines 58-col. 12, lines 2)

(c) determining a subsequent location of the feature in a video image from the video camera at a subsequent given time; (col. 12, lines 25-50)

(d) emulating use of a movement of the mouse to move the indicator in the visual display, by determining the indicator location at the given time based upon a location of the indicator at a previous time, and a change between a location of the indicator at a previous time, and a change between a location of the feature in the video image at the previous time and the location of the feature in the video image at the given time; and (col. 7, lines 10-16)

However, Johnson fails to teach emulating the use of a click from the mouse to provide an input signal to the system, by providing an input signal in response to the location of the feature in the video image remaining within a defined range during a defined period of time.

Maruno et al. teaches emulating the use of a click from the mouse to provide an input signal to the system, by providing an input signal in response to the location of the feature in the video image remaining within a defined range during a defined period of time. (col 8, lines 30-50)

It would have been obvious to an artisan at the time of the invention to include Maruno's teaching with method of Johnston in order to provide users with the ability to provide users with a direct and intuitive interface.

As per claim 49, Johnston et al. teaches a method of claim 48, wherein the step of choosing, the feature associated with a system user includes at least a portion of one of the system user's body, head, face, or article of clothing. (col. 10, lines 5-25)

As per claim 51, Johnston et al. teaches where the system is a computer program. (col. 8, lines 36-68)

As per claim 57, which is dependent on claim 48, Johnston and Maruno teach the claim 48. Johnston further teaches wherein the location of the feature in the video image at the given time is determined by correlating greyscale intensities of pixels in trial subimages of the video image at the given time, with greyscale intensities of pixels in a subimages including the chosen feature in the video image at the previous time, and selecting the trial subimage of the video image at the given time with the highest correlation to the subimage including the chosen feature in the video image at the previous time. (col 7, lines 35-48)

Claims 53, and 55-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnston et al. (US 6,791,531) in view of Maruno et al. (US 6,191,773) in view of Ball et al. (US 5,686,942).

As per claim 53, which is dependent on claim 49, Johnston et al. and Maruno teach claim 49.

However, they fail to teach wherein the step of choosing, the feature associated with a system user includes at least a portion of one of the system user's head or face.

Ball teaches the feature associated with a system user includes at least a portion of one of the system user's head or face. (column 3, lines 25-40)

It would have been obvious to an artisan at the time of the invention to include Ball's teaching with method of Johnston and Maruno in order to provide users with the ability to gesture with their heads.

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As per claim 55, which is dependent on claim 53, Johnston, Maruno, and Ball teach claim 53. Maruno further teaches wherein the video images from video camera are formed by reflection of ambient light from objects in the video camera field of view including reflection from the feature associated with the system user. (column 13, lines 35-45)

As per claim 56, which is dependent on claim 53, Johnston, Maruno, and Ball teach claim 53. Johnston further teaches wherein the location of the feature in the video image at the given time is determined by correlating greyscale intensities of pixels in trial subimages of the video image at the given time, with greyscale intensities of pixels in a subimages including the chosen feature in the video image at the previous time, and selecting the trial subimage of the video image at the given time with the highest correlation to the subimage including the chosen feature in the video image at the previous time. (col 7, lines 35-48)

Claim 52 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnston et al. (US 6,791,531) in view of Maruno et al. (US 6,191,773) in view of Dupouy et al. (US 6,057,845).

As per claim 52, Johnston and Maruno teach the method of claim 48. Johnston further teaches the method wherein the selection of the input signal is determined by the location of the feature in the video image (col. 11, lines 58-col. 12, lines 2)

However they fail to teach the method wherein:

the input signal provided is selected from a group consisting of letters, numbers, spaces, punctuation marks, other defined characters and signals associated with defined actions to be taken by the system; and

Dupouy teaches a method wherein the input signal provided is selected from a group consisting of letters, numbers, spaces, punctuation marks, other defined characters and signals associated with defined actions to be taken by the system. (col. 10, lines 55-col. 11 ,lines 5)

It would have been obvious to an artisan at the time of the invention to include Dupouy's teaching with the method of Johnston and Maruno in order to provide an input device for people with disabilities.

Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnston et al. (US 6,791,531) in view of Maruno et al. (US 6,191,773) in view of Ball et al. (US 5,686,942) in view of Dupouy et al. (US 6,057,845).

As per claim 54, which is dependent on claim Johnston, Maruno, and Ball teaches claim 53. Johnston further teaches the method wherein the selection of the input signal is determined by the location of the feature in the video image (col. 11, lines 58-col. 12, lines 2)

However they fail to teach the method wherein:

the input signal provided is selected from a group consisting of letters, number, spaces, punctuation marks, other defined characters and signals associated with defined actions to be taken by the system; and

Dupouy teaches a method wherein the input signal provided is selected from a group consisting of letters, numbers, spaces, punctuation marks, other defined characters and signals associated with defined actions to be taken by the system. (col. 10, lines 55-col. 11 ,lines 5)

It would have been obvious to an artisan at the time of the invention to include Dupouy's teaching with the method of Johnston, Maruno, and Ball n order to provide an input device for people with disabilities.

Response to Argument

Applicant's arguments with respect to claims 48-57 have been considered but are deemed to be moot in view of the new grounds of rejection.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peng Ke whose telephone number is (571) 272-4062. The examiner can normally be reached on M-Th and Alternate Fridays 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine L. Kincaid can be reached on (571) 272-4063. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Peng Ke

Kristine Kincaid
KRISTINE KINCAID
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100